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## NOTICE OF ALLOWANCE AND FEE(S) DUE

530 7590 12/12/2008

LERNER, DAVID, LITTENBERG,  
KRUMHOLZ & MENTLIK  
600 SOUTH AVENUE WEST  
WESTFIELD, NJ 07090

EXAMINER

NGUYEN, HAI V

ART UNIT

PAPER NUMBER

2618

DATE MAILED: 12/12/2008

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/549,591

05/22/2006

Kunio Fukuda

SONYJP 3.3-364

1103

TITLE OF INVENTION: INFORMATION PROCESSING APPARATUS, INFORMATION PROCESSING METHOD, RECORDING MEDIUM, AND PROGRAM

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	03/12/2009

**THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.**

**THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.**

### HOW TO REPLY TO THIS NOTICE:

#### I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

**IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.**

# **PART B - FEE(S) TRANSMITTAL**

**Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE  
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P.O. Box 1450  
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or Fax (571)-273-2885**

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

530 7590 12/12/2008

**LERNER, DAVID, LITTENBERG,  
KRUMHOLZ & MENTLIK  
600 SOUTH AVENUE WEST  
WESTFIELD, NJ 07090**

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

## **Certificate of Mailing or Transmission**

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

(Depositor's name)
(Signature)
(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/549,591 05/22/2006 Kunio Fukuda SONYJP 3.3-364 1103

TITLE OF INVENTION: INFORMATION PROCESSING APPARATUS, INFORMATION PROCESSING METHOD, RECORDING MEDIUM, AND PROGRAM

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
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nonprovisional NO \$1510 \$300 \$0 \$1810 03/12/2009

EXAMINER	ART UNIT	CLASS-SUBCLASS
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NGUYEN, HAI V 2618 455-522000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

- ☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.
- ☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. **Use of a Customer Number is required.**

2. For printing on the patent front page, list

- (1) the names of up to 3 registered patent attorneys or agents OR, alternatively, 1 \_\_\_\_\_
- (2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed. 2 \_\_\_\_\_
- 3 \_\_\_\_\_

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE (B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent) : ☐ Individual ☐ Corporation or other private group entity ☐ Government

4a. The following fee(s) are submitted:

- ☐ Issue Fee
- ☐ Publication Fee (No small entity discount permitted)
- ☐ Advance Order - # of Copies \_\_\_\_\_

4b. Payment of Fee(s); (Please first reapply any previously paid issue fee shown above)

- ☐ A check is enclosed.
- ☐ Payment by credit card. Form PTO-2038 is attached.
- ☐ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number \_\_\_\_\_ (enclose an extra copy of this form).

5. Change in Entity Status (from status indicated above)

- ☐ a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27. ☐ b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

Authorized Signature \_\_\_\_\_

Date \_\_\_\_\_

Typed or printed name \_\_\_\_\_

Registration No. \_\_\_\_\_

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/549,591	05/22/2006	Kunio Fukuda	SONYJP 3.3-364	1103
530	7590	12/12/2008	EXAMINER	
LERNER, DAVID, LITTENBERG, KRUMHOLZ & MENTLIK 600 SOUTH AVENUE WEST WESTFIELD, NJ 07090			NGUYEN, HAI V	
			ART UNIT	PAPER NUMBER
			2618	
DATE MAILED: 12/12/2008				

## Determination of Patent Term Adjustment under 35 U.S.C. 154 (b) (application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 162 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 162 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (<http://pair.uspto.gov>).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

<b>Notice of Allowability</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/549,591	FUKUDA, KUNIO	
	<b>Examiner</b>	<b>Art Unit</b>	
	HAI V. NGUYEN	2618	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 10 July 2008.
2. ☒ The allowed claim(s) is/are 1-2, 4-8, 10-16 that are renumbered as 1-14.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
  - \* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

**Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).**
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |  |  |
|--|--|
| <ol style="list-style-type: none"> <li>1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)</li> <li>2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),<br/>Paper No./Mail Date _____</li> <li>4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br/>of Biological Material</li> </ol> | <ol style="list-style-type: none"> <li>5. <input type="checkbox"/> Notice of Informal Patent Application</li> <li>6. <input type="checkbox"/> Interview Summary (PTO-413),<br/>Paper No./Mail Date _____.</li> <li>7. <input type="checkbox"/> Examiner's Amendment/Comment</li> <li>8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance</li> <li>9. <input type="checkbox"/> Other _____.</li> </ol> |
|--|--|

**Reasons for Allowance**

1. The following is an examiner's statement of reasons for allowance:
2. The primary reason for allowance of the claims is the inclusion of the elements of *"wherein said controlling means (Figure 5, element 81; Figure 6, element 121) compares a data length of the data to be transmitted with a threshold value (Figure 13, step 42); if the data length is not greater than the threshold value (Figure 13, step S42 to S43), said controlling means controls said transmission power such that the data is transmitted at a maximum controllable transmission power level or at a first transmission power level close to the maximum controllable transmission power level, and if the data length is greater than the threshold value (Figure 13, step S42 to S49), said controlling means controls said transmission power such that a first item of said information (Figures 8, 9, RTS frame) signaling a start of transmission of said data is transmitted at the maximum controllable transmission power level or at the first transmission power level, if a second item of said information (Figure 8, 10, CTS frame) is transmitted by said administrative system (Figure 8, Base station 3) based on the first information item to enable the start of transmission of said data and is received by said communicating means (Figures 5, 6, element 68), said measuring means (Figures 5, 6, element 68) measures a reception level of the second information item and said controlling means controls the power for transmitting said data based on said reception level measured by said measuring means"* in independent claims 1, 5, 6, 7, of *"communicating means (Figures 5, 6, element 68, 62, 111) which receives information (Figure 8, CTS element) from said administrative system (Figure 8, Base station 3) and*

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which first designates an address of said information processing apparatus as a receiving address in said second information (Figure 8, CTS frame) and controls transmission of said second information, and then (Figures 5, 6, CPU element 81 or 121) controls transmission of said data to said another information processing apparatus (Figure 8, terminal 31 or 32) via said administrative system" in independent claims 8, 14-16, and of Applicant's remarks on pages 17-20 received on 10 July 2008.

3. The prior art are silent of the elements above as explained below:

Garg et al. US patent # 7,286,474 B2 only discloses that, "As the standard specifies, the use of the RTS/CTS mechanism is specified on a per-station basis and each station can be configured to use RTS/CTS either always, never or only on frames longer than a specified length. Hence, if the policy of the sending station and the length of the transmitted frame are known, it can be determined whether RTS/CTS is used even without observing the transmission. The policy of each station in the network can either be obtained by observing its behavior or by querying it from the station. On a per-flow basis, the use of RTS/CTS can be estimated by the average size of frames belonging to the flow and the variation of it, (col. 14, lines 45-61)".

Li US patent # only discloses in Figure 1 that, "At step 102, setting an initial Contention Interval (CI) length in time slots, and in step 104 by resetting and initializing a timer. Method 100 then enters step 106 and counts messages or packets received and transmitted in the channel. The message counted may include RTS and CTS packets occurring in the channel (also referred to RTS and CTS events), (col. 3, lines 24-38)".

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Chen et al. US patent # 7,177,294 B2 only discloses in Figure 5A that, “ *The timing diagram of FIG. 5A may also be applied in an embodiment where the application of the jamming signal 202 may be recognized by the WLAN CCA Mode 3/5 function. The CCA Mode 3/5 function checks for the presence of a carrier with a transmission power above a threshold. If no carrier is sensed, the power is below the threshold, and the air channel is clear to send transmissions, then the WLAN station may proceed to transmit a data packet. If the transmission power is sensed above a threshold, then the air channel is asserted busy and the WLAN stations wait for an available frequency channel for transmission, (col. 16, lines 5-62)*”.

Whitehill US patent # 6,404,756 B1 only discloses in Figure 3b that, “*Referring again to FIG. 3b, upon receiving the RTS from node A' on the reservation channel, assuming a data channel is available, node B' replies to node A' with a CTS message on the reservation channel. Upon receiving the CTS message, node A' then transmits the information message to node B on data channel "1". Because channel access requests are transmitted on the separate reservation channel, another node can transmit an RTS message shortly after a previous RTS/CTS exchange is completed without waiting for the subsequent information message to be completed. For example, as shown in FIG. 3b, if node C' wishes to send a message to node D', node C' can transmit an RTS message on the reservation channel after the CTS message from node B' to node A', irrespective of whether the information message being transmitted from node A' to node B' is still being transmitted on data channel 1. Node D' then replies to node C' with a CTS message, and Node C' subsequently transmits an information*

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*message on another available data channel, such as data channel "2". As seen in FIG. 3b, the information message sent from node C' to node D' on data channel 2 can be transmitted simultaneously with the information message sent from node A' to node B' on data channel 1. The message from node C' to node D' is transmitted with essentially no delay resulting from transmission of the long message transmitted from node A' to node B', (col. 6,, line 51 – col. 7, line 8)".*

*Adachi US patent # 6,256,334 B1 only discloses in Figure 3 that, "The use/nonuse of the RTS/CTS frame and the maximum packet length are dynamically changed so as to improve the transmission performance of the radio LAN on the basis of the rate of occurrence of retransmission and the mean data frame length, (col. 23, lines 18-34, 53-61)".*

*Fischer et al. US patent # 5,889,772 only discloses in Figure 7 that, "Each station in the WLAN monitors each transmitted frame to determine whether the frame transmission was protected by an existing outstanding airtime reservation. If a frame is transmitted without an airtime reservation and no response frame is received, the station assumes that the transmission failed due to contention, and monitors the number of contention attempts made to transmit each frame, and the number of failures to receive an acknowledgement. Based on this information, the station dynamically adjusts an RTS/CTS threshold used to determine whether or not an RTS/CTS exchange mechanism should be enabled. If a frame is transmitted during a time interval protected by an outstanding airtime reservation and no response frame is received, the station assumes that the transmission failed due to a bit error, and monitors the number*

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*of bit error rate (BER) attempts made to transmit each frame, and the number of BER failures to receive an acknowledgement. Based on this information, the station dynamically adjusts a fragmentation threshold used to determine whether or not a data frame fragmentation mechanism should be enabled, (col. 13, lines 1-22)".*

4. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

5. **Claims 1-2, 4-8, 10-16 that are renumbered as 1-14 are allowed.**

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### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to HAI V. NGUYEN whose telephone number is (571)272-3901. The examiner can normally be reached on 6:00-3:30 Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duc M. Nguyen can be reached on 571-272-7503. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Hai V. Nguyen/  
Examiner, Art Unit 2618

/Duc Nguyen/  
Supervisory Patent Examiner, Art Unit 2618